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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,822	10/12/2000	Harry J. Chmielewski	53394.000443	5377

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EXAMINER	
ANDERSON, CATHARINE L	
ART UNIT	PAPER NUMBER
3761	

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/686,822	CHMIELEWSKI, HARRY J.	
	Examiner	Art Unit	
	C. Lynne Anderson	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 16-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 16-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (6,150,469).

Harada discloses all aspects of the claimed invention with the exception of less than 50% of the functional groups of the polymer being sodium neutralized. Harada discloses a superabsorbent composition comprising an underneutralized superabsorbent polymer, as described in column 6, lines 24-26. At least 50% of the functional groups of the polymer are in the free acid form, as disclosed in column 6, lines 50-52. Therefore, 50% of the functional groups of the polymer are neutralized. The composition further comprises a layered double hydroxide anionic clay, as disclosed in column 17, lines 47-65.

It would have been an obvious matter of design choice to have less than 50% of the functional groups be sodium neutralized, since the applicant has not shown that less than 50% neutralization, rather than 50% neutralization, solves any stated problem or serves any particular purpose. One of ordinary skill in the art at the time of invention would recognize that a polymer having a degree of

neutralization of 50% would have the same properties as the same polymer having a degree of neutralization of 49%.

With respect to claims 3-5, the superabsorbent polymer is sodium neutralized, as disclosed in column 8, line 60.

With respect to claim 6, the anionic clay is hydrotalcite, as disclosed in column 17, line 65.

With respect to claim 7, the claim discloses a product-by-process limitation. The claim is drawn to an article, and the final product disclosed by Harada is structurally identical to the product claimed. Harada therefore discloses the article disclosed in the claim.

With respect to claims 8 and 9, the superabsorbent polymer and anionic clay are present in a ration ranging from 1:1 to 1:10, as disclosed in column 18, lines 19-25.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (6,150,469) as applied to claim 1 above, and further in view of Jones, Sr. (3,794,034).

Harada discloses all aspects of the claimed invention but remains silent as to the pH range. Jones discloses an absorbent article having a pH in the range of 3.5 to 6.0, as described in column 1, lines 34-40. This pH range is preferred for absorbent articles because it inhibits bacterial growth, as disclosed in column 1, lines 52-56. It would therefore be obvious to one of ordinary skill in the art at

the time of invention to construct the composition of Harada with a pH in the range of 3.5-6.0, as taught by Jones, to inhibit bacterial growth.

Claims 10-12 and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (6,150,469) in view of Masaki et al. (5,821,179).

Harada discloses a superabsorbent composition comprising an underneutralized superabsorbent polymer, as described in column 6, lines 24-26. At least 50% of the functional groups of the polymer are in the free acid form, as disclosed in column 6, lines 50-52. The composition further comprises a layered double hydroxide anionic clay, as disclosed in column 17, lines 47-65. Harada discloses the superabsorbent composition can be used in an absorbent article, as described in column 1, lines 14-16, but remains silent as to the structure of the absorbent article.

It would have been an obvious matter of design choice to have less than 50% of the functional groups be sodium neutralized, since the applicant has not shown that less than 50% neutralization, rather than 50% neutralization, solves any stated problem or serves any particular purpose. One of ordinary skill in the art at the time of invention would recognize that a polymer having a degree of neutralization of 50% would have the same properties as the same polymer having a degree of neutralization of 49%.

Masaki discloses an absorbent article 100, as shown in figure 12, comprising a liquid pervious topsheet 1, a liquid impervious backsheet 3, and an absorbent core 2. The absorbent core 2 includes fluff pulp 12 and a

superabsorbent composition 16, as shown in figure 1B. The mixture of pulp and superabsorbent reduces gel blocking, as disclosed in column 7, lines 7-13.

It would therefore be obvious to one of ordinary skill in the art at the time of invention to produce an absorbent article comprising the superabsorbent composition of Harada with the structure taught by Masaki to reduce gel blocking of the superabsorbent composition.

With respect to claim 11, Harada, as modified by Masaki, discloses all aspects of the claimed invention with the exception of the superabsorbent present in the amount ranging from about 0.2 to about 0.8 grams per gram of fluff pulp. It would have been obvious to one of ordinary skill in the art at the time of invention to include the superabsorbent in the range of about 0.2 to about 0.8 grams per gram of fluff pulp, since it has been held that where the general conditions of the claim (i.e. a ratio of superabsorbent to fluff pulp) are known in the art, finding the optimum or workable ranges requires only routine skill in the art.

With respect to claim 12, Harada, as modified by Masaki, discloses all aspects of the claimed invention with the exception of the superabsorbent present in the amount ranging from about 3 to about 10 grams per gram of fibrous material. It would have been obvious to one of ordinary skill in the art at the time of invention to include the superabsorbent in the range of about 8 to about 10 grams per gram of fibrous material, since it has been held that where the general conditions of the claim (i.e. a ratio of superabsorbent to fibrous

material) are known in the art, finding the optimum or workable ranges requires only routine skill in the art.

With respect to claim 16, the superabsorbent polymer is sodium neutralized, as disclosed in column 8, line 60.

With respect to claim 17, the anionic clay is hydrotalcite, as disclosed in column 17, line 65.

With respect to claim 18, the claim discloses a product-by-process limitation. The claim is drawn to an article, and the final product disclosed by Harada is structurally identical to the product claimed. Harada therefore discloses the article disclosed in the claim.

With respect to claims 19 and 20, the superabsorbent polymer and anionic clay are present in a ration ranging from 1:1 to 1:10, as disclosed in column 18, lines 19-25.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (6,150,469) in view of Masaki et al. (5,821,179) as applied to claim 10 above, and further in view of Jones, Sr. (3,794,034).

Harada, as modified by Masaki, discloses all aspects of the claimed invention but remains silent as to the pH range. Jones discloses an absorbent article having a pH in the range of 3.5 to 6.0, as described in column 1, lines 34-40. This pH range is preferred for absorbent articles because it inhibits bacterial growth, as disclosed in column 1, lines 52-56. It would therefore be obvious to one of ordinary skill in the art at the time of invention to construct the composition

of Harada with a pH in the range of 3.5-6.0, as taught by Jones, to inhibit bacterial growth.

Response to Arguments

Applicant's arguments with respect to claims 1-13 and 16-20 have been considered but are moot in view of the new ground(s) of rejection.

In response to the applicant's argument that Harada fails to disclose less than 50% of the functional groups being neutralized, it is noted that Harada discloses 50% of the functional groups being neutralized, and it would be obvious to one of ordinary skill in the art that, in this case, the difference between 50% and 49% would be an obvious matter of design choice. A *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory

action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Lynne Anderson whose telephone number is (571) 272-4932. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on (571) 272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cla
November 24, 2004

Larry I. Schwartz
Supervisory Patent Examiner
Group 3700